---
title: "R Notebook"
output: html_notebook

This is an [R Markdown](http://rmarkdown.rstudio.com) Notebook. When you execute code within the notebook, the results appear beneath the code.

Try executing this chunk by clicking the *Run* button within the chunk or by placing your cursor inside it and pressing *Cmd+Shift+Enter*.

```{r}
plot(cars)
```

Add a new chunk by clicking the *Insert Chunk* button on the toolbar or by pressing *Cmd+Option+I*.

When you save the notebook, an HTML file containing the code and output will be saved alongside it (click the *Preview* button or press *Cmd+Shift+K* to preview the HTML file).

The preview shows you a rendered HTML copy of the contents of the editor. Consequently, unlike *Knit*, *Preview* does not run any R code chunks. Instead, the output of the chunk when it was last run in the editor is displayed.

---
title: "Vfoster4_Module4"
output: pdf_document
date: "2023-09-24"

```{r setup, include=FALSE}
knitr::opts_chunk$set(echo = TRUE)
```

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```{r cars}
summary(cars)
```

Including Plots

You can also embed plots, for example:

```{r pressure, echo=FALSE}
```

plot(pressure)
```

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

library(lpsolveapi)

We have 2 variables and 3 Constraints

x1= number of collegiate bags
x2= number of mini bags
y= maximum profit

lprec <make.lp(0,2)

x1 = 1
x2 = 2
 set objectective function
 set.objfn(lprec, c(3,5))

 lp.control(lprec,sense='max')

 add.contraint(lprec, c(1,0), "<=", 4)
 add.constraint(lprec, c(0,2), "<=",12)
 add.constraint(lprec, c(3,2), "<=, 18)

 set.bounds(lprec, lower = c(0,0), columna = c(1,2)

 row.names <- c("plant1", "plant2", "plant3")

colnames <- c("product1", "product2")
dimnames(lprec) <-list(row.names, colnames)

printing out model
```